Document the use-case

The use-case diagram depicts how a user can book a stay at their desired hotel via booking.com. When the user opens the website, they must select their country/region and choose currency in which they would pay for their stay. After that they enter the destination at which they want to book a hotel. In the filter search, they can specify the duration of their stay, number of rooms they want to book, number of guests staying etc. The user can select the hotels that they like based on various factors listed in the property specifications (such as hotel rating, price range, amenities included etc.). Then the system shows the price and types of rooms available for the user to book from. The user must select at least one room to proceed with the reservation. The user provides the necessary booking details such as guest name, contact information etc. The system prompts the user to select the payment options which users can choose to pay for their stay. The users have option to pay at the property or pay online using credit/visa/MasterCard or apple/google pay. When the payment is done, the system sends the booking confirmation to the user email they provided.

Gather requirements.

The requirements for the system to book hotels through booking.com are as follows:

The system must be able to keep booking information up to date on availability of rooms, new additions of rooms, hotels, properties etc. The properties listed on the website are created with contact details, fee policies and other information. The properties need to have an inventory of rooms to sell to guests. The room information must also include the details like room’s size, smoking or non-smoking and what amenities are included in the base price for the room. The combination of room, rate and policies for fees, cancellation, stay etc., are what the customer buys on the website booking.com. This is known as the product. These listings by hotels are then checked and verified by the system. Once verified, the customer can see the listings of the hotels on the website. The system then stores the listings of the hotel with the property information. The system must also provide a way for the users to select their desired location and specified dates and number of nights they want to stay based on the property information such as location, city name, postal code, country code. When the property has listed all the rooms available to sell to guests, the customer will see various room types and prices. Customers can then select the room type and number of rooms they want to book. Then the system is required to store the details of the customers that they entered which can then be used further for cancellation, access to booking in future etc. The system can use relational databases to store the properties information and the customers’ information. It must be able to support a reliable and scalable DBMS system such as MySQL, Oracle, PostgreSQL, etc. The details of booking transactions, accommodations booked, payment methods, amount, refunds issued, and cancellations processed for booking are needed to be stored in the system database as well.